



State of Utah

JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

## Department of Administrative Services

RICHARD K. ELLIS  
Executive Director

### Division of Facilities Construction and Management

F. KEITH STEPAN  
Director

# ADDENDUM #1

Date: 10 July 2006

To: Contractors

From: Vic Middleton, Project Manager, DFCM

Reference: Classroom Infrastructure and New Restroom Vocational Training Ctr.  
Draper Prison – Department of Corrections  
DFCM Project No. 04256100

Subject: **Addendum No. 1**

Pages	Addendum	1	page
	Revised Project Schedule	1	page
	AJC Architectural Specs		
	Electrical/Mechanical Specs	12	pages
	<b>Total</b>	<b>14</b>	<b>pages</b>

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**Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.**

## 1.1 SCHEDULE CHANGES – Reference Revised Project Schedule

### 1.1.1 GENERAL

- a. The Project Schedule has been revised. ***This revision dated July 10, 2006 has resulted in changes to the Deadline for Submitting Question, Final Addendum Issued, Prime Contractors Turn-In Bid and Bid Bond/Bid Opening and Sub-Contractor List Due.***
- b. Attached is a 12 page document relating to the architectural, electrical, mechanical and acoustic specifications/modifications.

**End of Addendum**

**Division of Facilities Construction and Management**

**Stage II**  
**PROJECT SCHEDULE – REVISED**  
**PER ADDENDUM NO. 1 ISSUED JULY 10, 2006**

<b>PROJECT NAME: CLASSROOM INFRASTRUCTURE AND NEW RESTROOM VOCATIONAL TRAINING CENTER - DRAPER PRISON DEPARTMENT OF CORRECTIONS – DRAPER, UTAH</b>				
<b>DFCM PROJECT # 04256100</b>				
<b>Event</b>	<b>Day</b>	<b>Date</b>	<b>Time</b>	<b>Place</b>
Stage II Bidding Documents Available	Thursday	June 15, 2006	12:00 NOON	DFCM 4110 State Office Building SLC, UT and DFCM web site*
Mandatory Pre-bid Site Meeting	Wednesday	June 21, 2006	9:30 AM	Vocational Training Center Draper Prison Draper, Utah
<b>Deadline for Submitting Questions</b>	<b>Friday</b>	<b>July 14, 2006</b>	<b>4:00 PM</b>	DFCM 4110 State Office Building SLC, UT
<b>Final Addendum Issued</b>	<b>Monday</b>	<b>July 17, 2006</b>	<b>4:00 PM</b>	DFCM web site*
<b>Prime Contractors Turn in Bid and Bid Bond / Bid Opening in DFCM Conference Room</b>	<b>Thursday</b>	<b>July 20, 2006</b>	<b>3:00 PM</b>	DFCM 4110 State Office Building SLC, UT
<b>Subcontractors List Due</b>	<b>Friday</b>	<b>July 21, 2006</b>	<b>3:00 PM</b>	DFCM 4110 State Office Building SLC, UT
Project Completion Deadline	120 Days After Notice to Proceed			

\* DFCM's web site address is <http://dfcm.utah.gov>



ajc architects

addendum  
# 1

**Draper Prison ATE**

Wood Framed VT Classrooms

**Draper Utah**

**ajc architects project #: 0502**

**dfcm project #: 04256100**

date: Monday, July 10, 2006

pages: 12

*The bidders on the above captioned project shall be governed by the following changes, additions, and/or deletions in the Drawings and Specifications. This Addendum shall be included as part of the Contract Documents.*

- Items
- Item 1: Soil compaction report is not required contrary to civil notation. The client will provide compaction as discussed during pre-bid meeting.
- Item 2: Saw cutting the existing concrete paving as shown on AS102 may not be required per pre-bid meeting. Supply separate add-alternate costs for all saw cutting as shown in the construction documents.
- Item 3: Clarification: AS101, AS102, Civil: The concrete waterway shown on the west and south sides of the new building is new by contractor.
- Item 4: The restroom structure is base bid and to include adding on to the existing structure and appear a finished, stand alone building. Siding, soffit, and fascia install on the new south end as defined in the documents by the 'limits of construction'. Provide block out framing for future door 108f.
- Item 5: Utilize the top of slab designations from the architectural sheets AE101 in lieu of the structural T.O.S. sheet S201.
- Item 6: Disregard bollard detail shown on AE501. No bollards required.
- Item 7: See attached acoustical panel ceilings spec.
- Item 8: The electrical panel for the restroom building shall be located on the existing pedestal mounted panel/meter which is noted on sheet ES101, note P6.
- Item 9: See attached mechanical and electrical addendum.

ELECTRICAL ADDENDUM NO. 1

PROJECT: ATE CENTER at Utah State Prison  
VOCATIONAL CLASSROOMS  
Draper, Utah

PROJECT ENGINEER: Thomas & Kolkman Engineering Co. Inc.  
64 West 1700 South  
Salt Lake City, Utah 84115  
Phone (801) 484-8161  
Fax (801) 484-3538

DATE: June 28, 2006

NUMBER OF PAGES: 1  
Attachments: none

Incorporate the following clarifications and revisions in the specifications, drawings, and other contract documents of the above named project. Unless described otherwise, all labor and materials for the work described herein shall be in accordance with the requirements of the original contract documents.

This addendum becomes a part of the Contract Documents and the cost of all items herein shall be included in the Contractor's Proposal. Contractors are instructed to acknowledge receipt of this addendum on the appropriate place of the Proposal Form.

ITEM EAD1-1: LARGE ROOM OCCUPANCY SENSOR MODIFICATION

- A. Large Room Occupancy Sensors shall be rated for minimum of 1800 watts at 120 volts
  - 1. Provide:
    - a. Low Voltage Sensors (Watt Stopper type DT-305) with minimum 15 amp rated Switch Pack (Watt Stopper type BZ-100). Control wiring between Sensors and Switch Pack shall be in conduit 3 #12, 3/4"C.

END OF ELECTRICAL ADDENDUM NO. 1

# ADDENDUM

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Project Name: Draper Prison Vocational Training Center

Addendum No.: 1

WHW Project # 06009

Date: July 7, 2006

From: WHW Engineering Inc  
1354 East 3300 South Suite 200  
Salt Lake City, Utah 84106  
Phone (801) 466-4021 Fax (801) 466-8536

To:

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This Addendum forms and becomes a part of the Contract Documents and modifies the original Bidding Documents dated July 7, 2006 as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of 2 pages.

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**I - CHANGES TO PRIOR ADDENDA: N/A**

**II - CHANGES TO BIDDING REQUIREMENTS: N/A**

**III - CHANGES TO AGREEMENT & OTHER CONTRACT FORMS: N/A**

**IV – CHANGES/CLARIFICATIONS TO CONDITIONS OF THE CONTRACT: N/A**

**V - CHANGES/CLARIFICATIONS TO SPECIFICATIONS: N/A**

**VI - CHANGES/CLARIFICATIONS TO DRAWINGS: N/A**

## PRIOR APPROVALS

THE FOLLOWING ITEMS, AS SUBMITTED, ARE CONSIDERED, IN GENERAL AND IN NAME ONLY, AS EQUAL TO THOSE ITEMS SPECIFIED. THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR OR SUPPLIER OF THE RESPONSIBILITY OF CONFORMING TO THE DRAWINGS AND SPECIFICATIONS, NOR DOES IT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS FOR COORDINATION WITH OTHER TRADES. ALL DIMENSIONS SHALL BE CONFIRMED AND CORRELATED AT THE JOBSITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND THE SUITABILITY OF "EQUAL" PRODUCTS FOR THE SPECIFIED APPLICATION.

### Description

### Manufacturer

SS-1 - Faucet  
DF-1, DF-2 - Drinking Fountain  
Gas-Fired and Electric Water Heaters  
Backflow Preventers  
Heavy Gauge Traps  
Electric Ceiling Panel

Chicago  
Acorn Aqua  
American Water Heater Co.  
Wilkins Division  
Zurn  
Markel

Exhaust Fans  
Wall Mounted A/C and Heating  
Registers, Grilles and Diffusers, Louvers  
Electric Ceiling Panels  
Low Sidewall Return Grilles  
Drinking Fountains, Water Coolers

ACME Engineering  
Airxcel, Inc.  
Nailor Industries  
Redd-I  
Titus  
Haws Corporation Products

## SECTION 09511 - ACOUSTICAL PANEL CEILINGS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes acoustical panels and exposed suspension systems for ceilings.

#### 1.3 DEFINITIONS

- A. AC: Articulation Class.
- B. CAC: Ceiling Attenuation Class.
- C. LR: Light Reflectance coefficient.
- D. NRC: Noise Reduction Coefficient.

#### 1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Coordinate Drawings: Reflected ceiling plans drawn to scale and coordinating penetrations and ceiling-mounted items. Show the following:
  - 1. Ceiling suspension members.
  - 2. Method of attaching hangers to building structure.
  - 3. Ceiling-mounted items including lighting fixtures, diffusers, grilles, speakers, and access panels.
  - 4. Minimum Drawing Scale: 1/4 inch = 1 foot (1:48).
- C. Samples for Initial Selection: For components with factory-applied color finishes.
- D. Samples for Verification: For each component indicated and for each exposed finish required, prepared on Samples of size indicated below.
  - 1. Acoustical Panel: Set of 6-inch- (150-mm-) square Samples of each type, color, pattern, and texture.
  - 2. Exposed Suspension System Members, Moldings, and Trim: Set of 12-inch- (300-mm-) long Samples of each type, finish, and color.

- E. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each acoustical panel ceiling.
- F. Research/Evaluation Reports: For each acoustical panel ceiling and components and anchor type.
- G. Maintenance Data: For finishes to include in maintenance manuals.

#### 1.5 QUALITY ASSURANCE

- A. Acoustical Testing Agency Qualifications: An independent testing laboratory, or an NVLAP-accredited laboratory, with the experience and capability to conduct the testing indicated, as documented according to ASTM E 548. NVLAP-accredited laboratories must document accreditation, based on a "Certificate of Accreditation" and a "Scope of Accreditation" listing the test methods specified.
- B. Source Limitations:
  - 1. Acoustical Ceiling Panel: Obtain each type through one source from a single manufacturer.
  - 2. Suspension System: Obtain each type through one source from a single manufacturer.
- C. Source Limitations: Obtain each type of acoustical ceiling panel and supporting suspension system through one source from a single manufacturer.
- D. Fire-Test-Response Characteristics: Provide acoustical panel ceilings that comply with the following requirements:
  - 1. Fire-Resistance Characteristics: Where indicated, provide acoustical panel ceilings identical to those of assemblies tested for fire resistance per ASTM E 119 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
    - a. Fire-Resistance Ratings: Indicated by design designations from UL's "Fire Resistance Directory" or from the listings of another testing and inspecting agency.
    - b. Identify materials with appropriate markings of applicable testing and inspecting agency.
  - 2. Surface-Burning Characteristics: Provide acoustical panels with the following surface-burning characteristics complying with ASTM E 1264 for Class B materials as determined by testing identical products per ASTM E 84:
    - a. Smoke-Developed Index: 450 or less.
- E. Seismic Standard: Provide acoustical panel ceilings designed and installed to withstand the effects of earthquake motions according to the following:
  - 1. Standard for Ceiling Suspension Systems Requiring Seismic Restraint: Comply with ASTM C 635.
- F. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustical panels, suspension system components, and accessories to Project site in original, unopened packages and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.
- B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.
- C. Handle acoustical panels carefully to avoid chipping edges or damaging units in any way.

## 1.7 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install acoustical panel ceilings until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
  - 1. Pressurized Plenums: Operate ventilation system for not less than 48 hours before beginning acoustical panel ceiling installation.

## 1.8 COORDINATION

- A. Coordinate layout and installation of acoustical panels and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.

## 1.9 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Acoustical Ceiling Panels: Full-size panels equal to 2.0 percent of quantity installed.
  - 2. Suspension System Components: Quantity of each exposed component equal to 2.0 percent of quantity installed.
  - 3. Hold-Down Clips: Equal to 2.0 percent of amount installed.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply for product selection:
  - 1. Basis of Design Product: Subject to compliance with requirements, provide the Basis of Design product specified, or an Approved Equal.

## 2.2 ACOUSTICAL PANELS, GENERAL

- A. Acoustical Panel Standard: Provide manufacturer's standard panels of configuration indicated that comply with ASTM E 1264 classifications as designated by types, patterns, acoustical ratings, and light reflectances, unless otherwise indicated.
  - 1. Mounting Method for Measuring NRC: Type E-400; plenum mounting in which face of test specimen is 15-3/4 inches (400 mm) away from test surface per ASTM E 795.
- B. Acoustical Panel Colors and Patterns: Match appearance characteristics indicated for each product type.
  - 1. Where appearance characteristics of acoustical panels are indicated by referencing pattern designations in ASTM E 1264 and not manufacturers' proprietary product designations, provide products selected by Architect from each manufacturer's full range that comply with requirements indicated for type, pattern, color, light reflectance, acoustical performance, edge detail, and size.

## 2.3 CAST OR MOLDED, ACOUSTICAL PANELS FOR ACOUSTICAL PANEL CEILING ACT

- A. Basis of Design Product:
  - 1. USG, Radar – ClimaPlus, or approved equal.
- B. Classification: Provide panels complying with ASTM E 1264 for type, form, and pattern as follows:
  - 1. Type and Form: Type III, mineral base with painted finish; Form 2, Pattern CDK, cast or molded.
- C. Color: White.
- D. LR: Not less than 0.84.
- E. NRC: Not less than 0.55.
- F. CAC: Not less than 35.
- G. Edge Detail: Square.
- H. Thickness: 5/8 inch (15 mm).
- I. Size: 24 by 48 inches (610 by 1220 mm).

## 2.4 METAL SUSPENSION SYSTEMS, GENERAL

- A. Metal Suspension System Standard: Provide manufacturer's standard direct-hung metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable requirements in ASTM C 635.

- B. Finishes and Colors, General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes. Provide manufacturer's standard factory-applied finish for type of system indicated.
- C. Attachment Devices: Size for five times the design load indicated in ASTM C 635, Table 1, "Direct Hung," unless otherwise indicated.
  - a. Corrosion Protection: Carbon-steel components zinc plated to comply with ASTM B 633, Class Fe/Zn 5 (0.005 mm) for Class SC 1 service condition.
- D. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:
  - 1. Zinc-Coated Carbon-Steel Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
- E. Angle Hangers: Angles with legs not less than 7/8 inch (22 mm) wide; formed with 0.04-inch- (1-mm-) thick, galvanized steel sheet complying with ASTM A 653/A 653M, G90 (Z275) coating designation; with bolted connections and 5/16-inch- (8-mm-) diameter bolts.
- F. Seismic Struts: Manufacturer's standard compression struts designed to accommodate seismic forces.
- G. Seismic Clips: Manufacturer's standard seismic clips designed and spaced to secure acoustical panels in-place.
- H. Hold-Down Clips: Where indicated, provide manufacturer's standard hold-down clips spaced 24 inches (610 mm) o.c. on all cross tees.

## 2.5 METAL SUSPENSION SYSTEM FOR ACOUSTICAL PANEL CEILING ACT

- A. Available Products:
  - 1. Donn, DX.
- B. Wide-Face, Capped, Double-Web, Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet, prepainted, electrolytically zinc coated, or hot-dip galvanized according to ASTM A 653/A 653M, not less than G30 (Z90) coating designation, with prefinished 15/16-inch- (24-mm-) wide metal caps on flanges.
  - 1. Structural Classification: Heavy-duty system.
  - 2. End Condition of Cross Runners: Override type.
  - 3. Face Design: Flat, flush.
  - 4. Cap Material: Steel cold-rolled sheet.
  - 5. Cap Finish: Painted white.

## 2.6 METAL EDGE MOLDINGS AND TRIM

- A. Available Manufacturers:
  - 1. Armstrong World Industries, Inc.
  - 2. Celotex Corporation; Architectural Ceilings Marketing Dept.
  - 3. Chicago Metallic Corporation.
  - 4. Fry Reglet Corporation.
  - 5. USG Interiors, Inc.

- B. Roll-Formed Sheet-Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that fit acoustical panel edge details and suspension systems indicated; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension system runners.

## 2.7 ACOUSTICAL SEALANT

### A. Available Products:

#### 1. Acoustical Sealant for Exposed and Concealed Joints:

- a. Pecora Corp; AC-20 FTR Acoustical and Insulation Sealant.
- b. United States Gypsum Co.; SHEETROCK Acoustical Sealant.

- B. Acoustical Sealant for Exposed and Concealed Joints: Manufacturer's standard nonsag, paintable, nonstaining latex sealant, with a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24), complying with ASTM C 834 and effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, including structural framing to which acoustical panel ceilings attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage and with requirements for installation tolerances and other conditions affecting performance of acoustical panel ceilings.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders, and comply with layout shown on reflected ceiling plans.

### 3.3 INSTALLATION, GENERAL

- A. General: Install acoustical panel ceilings to comply with ASTM C 635 and seismic requirements indicated, per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
- B. Suspend ceiling hangers from building's structural members and as follows:
  - 1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.

2. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
  3. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers at spacings required to support standard suspension system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards and publications.
  4. Secure wire hangers to ceiling suspension members and to supports above with a minimum of three tight turns. Connect hangers directly either to structures or to inserts, eye screws, or other devices that are secure and appropriate for substrate and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
  5. Do not attach hangers to steel deck tabs.
  6. Do not attach hangers to steel roof deck. Attach hangers to structural members.
  7. Space hangers not more than 48 inches (1200 mm) o.c. along each member supported directly from hangers, unless otherwise indicated; provide hangers not more than 8 inches (200 mm) from ends of each member.
- C. Secure bracing wires to ceiling suspension members and to supports with a minimum of four tight turns. Suspend bracing from building's structural members as required for hangers, without attaching to permanent metal forms, steel deck, or steel deck tabs. Fasten bracing wires into concrete with cast-in-place or postinstalled anchors.
- D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels.
1. Apply acoustical sealant in a continuous ribbon concealed on back of vertical legs of moldings before they are installed.
  2. Screw attach moldings to substrate at intervals not more than 16 inches (400 mm) o.c. and not more than 3 inches (75 mm) from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet (3.2 mm in 3.66 m). Miter corners accurately and connect securely.
  3. Do not use exposed fasteners, including pop rivets, on moldings and trim.
- E. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.
- F. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.
1. Arrange directionally patterned acoustical panels as follows:
    - a. As indicated on reflected ceiling plans.
  2. For square-edged panels, install panels with edges fully hidden from view by flanges of suspension system runners and moldings.
  3. Paint cut edges of panel remaining exposed after installation; match color of exposed panel surfaces using coating recommended in writing for this purpose by acoustical panel manufacturer.
  4. Install hold-down clips in areas indicated, in areas required by authorities having jurisdiction, and for fire-resistance ratings; space as recommended by panel manufacturer's written instructions, unless otherwise indicated.

3.4 FIELD QUALITY CONTROL

- A. Remove and replace acoustical panel ceiling hangers where they do not comply with specified requirements.

3.5 CLEANING

- A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION 09511